

(12) **United States Patent**
Followell et al.

(10) **Patent No.:** **US 9,671,314 B2**
(45) **Date of Patent:** ***Jun. 6, 2017**

(54) **SYSTEM AND METHOD TO ASSESS AND REPORT THE HEALTH OF LANDING GEAR RELATED COMPONENTS**

(58) **Field of Classification Search**
CPC ... G01C 21/165; G01C 23/005; G01M 17/02;
G01M 17/04

(71) Applicant: **The Boeing Company**, Chicago, IL (US)

(Continued)

(72) Inventors: **David A. Followell**, Wildwood, MO (US); **Jeanne C. Maggiore**, Wildwood, MO (US); **Wayne R. Majkowski**, Florissant, MO (US)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,849,701 A 8/1958 Clark
4,463,428 A 7/1984 Gillaim

(Continued)

(73) Assignee: **THE BOEING COMPANY**, Chicago, IL (US)

FOREIGN PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 106 days.

EP 0512866 A1 11/1992
EP 1884453 A2 11/1992

(Continued)

This patent is subject to a terminal disclaimer.

OTHER PUBLICATIONS

(21) Appl. No.: **14/246,143**

Office Action, dated Apr. 15, 2015, regarding U.S. Appl. No. 12/701,033, 37 pages.

(22) Filed: **Apr. 7, 2014**

(Continued)

(65) **Prior Publication Data**

US 2014/0222325 A1 Aug. 7, 2014

Related U.S. Application Data

Primary Examiner — Thomas G Black

Assistant Examiner — Wae Louie

(74) *Attorney, Agent, or Firm* — Yee & Associates, P.C.

(63) Continuation of application No. 12/854,671, filed on Aug. 11, 2010, now Pat. No. 8,712,634.

(57) **ABSTRACT**

The different advantageous embodiments provide an apparatus comprising a number of landing gear components for a vehicle, a number of systems, and a number of processor units. The number of systems is configured to generate data about the number of landing gear components and the vehicle. The number of processor units is configured to monitor the data and manage health of the number of landing gear components.

(51) **Int. Cl.**
G01M 17/00 (2006.01)
G06F 19/00 (2011.01)

(Continued)

(52) **U.S. Cl.**
CPC **G01M 17/04** (2013.01); **B64F 5/60** (2017.01); **G01M 1/125** (2013.01);
(Continued)

22 Claims, 8 Drawing Sheets

